



[4910-13-P]

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2013-1004; Directorate Identifier 2013-NE-34-AD; Amendment 39-17719; AD 2013-26-10]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Rolls-Royce plc Turbofan Engines**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for all Rolls-Royce plc (RR) RB211-524G2-19, RB211-524G3-19, RB211-524H-36, and RB211-524H2-19 turbofan engines. This AD requires a one-time reduction in the cyclic life of certain high-pressure (HP) compressor rotor stage 1 and stage 2 discs, and removal of discs that exceed the reduced cycle life. This AD was prompted by a review by RR of the cyclic life of life-limited parts (LLPs) for RB211-524 series engines. We are issuing this AD to prevent the failure of certain LLPs, which could result in uncontained engine damage and damage to the airplane.

**DATES:** This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.
- Mail: U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
- Fax: 202-493-2251.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2013-1004; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (phone: 800-647-5527) is the same as the Mail address provided in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Robert Green, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: [robert.green@faa.gov](mailto:robert.green@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2013-0246, dated October 10, 2013 (referred to herein after as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

Rolls-Royce recently reviewed the cyclic lives of critical parts of the RB211-524 series engines, which has resulted in the identification of a reduced cyclic life limit for certain high-pressure (HP) compressor Rotor Stage 1 and 2 Discs.

Operation of critical parts beyond these reduced cyclic life limits could lead to part failure and consequent release of high-energy debris, possibly resulting in damage to the aeroplane and/or injury to the occupants.

You may obtain further information by examining the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2013-1004.

### **FAA’s Determination and Requirements of this AD**

This product has been approved by the aviation authority of the United Kingdom, and is approved for operation in the United States. Pursuant to our bilateral agreement with the European Community, EASA has notified us of the unsafe condition described in the MCAI and service information referenced above. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design. This AD requires a one-time reduction in the cyclic life of certain HP compressor stage 1 and stage 2 discs, and removal of discs that exceed the reduced cycle life.

### **FAA's Determination of the Effective Date**

No domestic operators use this product. Therefore, we find that notice and opportunity for prior public comment are unnecessary and that good cause exists for making this amendment effective in less than 30 days.

### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2013-1004; Directorate Identifier 2013-NE-34-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this AD. Using the search function of the Web site, anyone can find and read the comments in any of our dockets, including, if provided, the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review the DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78).

## **Costs of Compliance**

We estimate that this AD will affect 0 engines installed on airplanes of U.S. registry. We also estimate that it will take about 0 hours per engine to comply with this AD. The average labor rate is \$85 per hour. The prorated cost of the parts, adjusted for lost life, is about \$15,940 per engine. Based on these figures, we estimate the total cost of this AD to U.S. operators is \$0.

## **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2013-26-10 **Rolls-Royce plc**: Amendment 39-17719; Docket No. FAA-2013-1004; Directorate Identifier 2013-NE-34-AD.

**(a) Effective Date**

This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to all Rolls-Royce plc (RR) RB211-524G2-19, RB211-524G3-19, RB211-524H-36, and RB211-524H2-19 turbofan engines with high-pressure (HP) compressor rotor stage 1 and stage 2 discs, part number LK70608, LK76030, LK86621, UL19877, UL19878, UL19879, or UL24023, installed.

**(d) Reason**

This AD was prompted by a review by RR of the cyclic life of critical-life-limited parts (LLPs) for RB211-524 series engines. We are issuing this AD to prevent the failure of certain LLPs, which could result in uncontained engine damage and damage to the airplane.

**(e) Actions and Compliance**

Comply with this AD within the compliance times specified, unless already done.

(1) Within 30 days after the effective date of this AD, reduce the cyclic life limit for the affected HP compressor rotor stage 1 and stage 2 discs to 7,390 flight cycles (FC).

(2) After the effective date of this AD, remove each affected HP compressor rotor stage 1 and stage 2 disc from service before the part exceeds 7,390 FC.

(3) After the effective date of this AD, do not return to service any engine that has an HP compressor rotor stage 1 and stage 2 disc installed, if the disc has more than 7,390 FC.

**(f) Alternative Methods of Compliance (AMOCs)**

The Manager, Engine Certification Office, FAA, may approve AMOCs to this AD. Use the procedures found in 14 CFR 39.19 to make your request.

**(g) Related Information**

(1) For more information about this AD, contact Robert Green, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: robert.green@faa.gov.

(2) Refer to MCAI European Aviation Safety Agency AD 2013-0246, dated October 10, 2013, for more information. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2013-1004.

**(h) Material Incorporated by Reference**

None.

Issued in Burlington, Massachusetts, on December 23, 2013.

Carlos A. Pestana,  
Acting Assistant Directorate Manager, Engine & Propeller Directorate,  
Aircraft Certification Service.

[FR Doc. 2014-00083 Filed 01/07/2014 at 8:45 am; Publication Date: 01/08/2014]